## VOLUNTEER INSTRUCTIONS MATH

Welcome to Math! Thank you for volunteering your time and sharing your talents.

Goal: In this module, the students will work together in teams to complete three math activities consisting of: 10 math scavenger hunt problems, a geometry puzzle, and 3 puzzle stick problems. The first team to complete all three math activities will be the winner.

Divide the students into teams with approximately the same number of students on each team. A table is a team.

## Introduce yourself and briefly share your career/education background.

Opening Comments: Hand out an answer sheet to each table. Tell the students that they will work together as a team to solve three math activities consisting of: 10 scavenger hunt problems, 1 geometry puzzle and 3 puzzle stick questions. Briefly describe each activity as you review their answer sheet with them showing them the head table with the math activities on it. They should complete Activity 1 first (random order is fine, as long as they complete each of the 10 categories consisting of 10 cards). Then move on to Activity 2 by getting the puzzle box with the laminated sheet. They must complete the puzzle exactly as it is on the picture. Again, they must raise their hand when completed to have it checked and then mark it on their answer sheet. And finally, Activity 3, the 3 puzzle sticks problems in the baggies. No cell phones can be used, only the scratch paper on the table.

## Activity 1 - Scavenger Hunt Math Challenge:

Place the Challenge cards on the head table with the category picture facing up. The category name and challenge question are listed on the opposite side of the card facing down. Each picture matches a category on the student answer sheet. The students will begin by having one student choose a card from one of the ten categories listed on their answer sheet from the head table and take the card back to their team/table. They should work together to solve the problem, write their answer on their answer sheet, and raise their hand to verify that the answer is correct. Check their answers using the Math Answer Key provided. If correct, they will keep their category card and then select another student to go to the head table and choose another card from a different category from their answer sheet. Play continues until all 10 categories have been solved correctly.

They should use the pencils/scratch paper that is provided. NO cell phones should be used to solve the problems. If a team completes Activity 1 , they should immediately move to Activity 2.

## Activity 2 - Puzzle Blocks:

To begin Activity 2, a student will once again go to the head table and pick up a puzzle box and a laminated sheet with the picture of the Lion's face on it. Again, as a team, they will work together to solve the puzzle. THE PUZZLE SHOULD BE SOLVED ON THE TABLE, NOT IN THE BOX. When completed, it should look exactly like the picture on the laminated sheet. The trick to this puzzle, several sides of the blocks can be used. The teams will more than likely get down to several blocks left, and they will not be the blocks that they need to complete the puzzle. They will then have to go back and see where they can switch blocks out to use all the blocks and complete the puzzle. When a team completes the puzzle, they should raise their hand and have it checked, mark their answer sheet, and place the blocks back into the box, return the box to the head table and move on to the last math activity.

## Activity 3 - Geometry Sticks:

To begin Activity 3, a student will pick up a plastic baggie that contains the sticks needed for the puzzles and the 3 stick problems. Students can pick which picture they would like to start on. There is not an order in which each picture must be completed. The students should place the sticks on the table so that they resemble the picture on the card. Then they should follow the directions on the card by removing the number of sticks to change the picture. Once again, students should raise their hand when each picture is completed to have it checked. Use the answer key provided. Students should check the box on their answer sheet after each stick problem has been completed.

The first team to complete all 3 activities correctly is the WINNER!

Conclusion: Discuss with the students what they just learned through this activity. Which activity was their favorite and why? Did different team members have different strengths? Was one person stronger with the puzzles and another with the problem solving?

## End of the Day:

- Throw away any scrap paper.
- Collect any materials, puzzles, volunteer instructions and place them in the Math bin.

